

**Chesapeake Bay Program
Point Source and Nonpoint Source
Data Submission Specifications and Requirements**

The Tributary Strategy and Point Source Workgroups of the Nutrient Subcommittee coordinate with the Modeling and Communications Subcommittees and Implementation Committee to establish progress data submission dates that meet the communications and management needs of the Chesapeake Bay Program. State Implementation Grant Work Plan deliverables must include schedules for submission of point source and nonpoint source nutrient reduction activities for use in Chesapeake Bay Watershed Model annual progress scenarios. The following point source and nonpoint source data submission requirements were developed by the Tributary Strategy and Point Source workgroups to meet Bay Program watershed model requirements. The following information reflects the latest agreements and minimum data requirements.

Fully QA/QC data is expected to meet the established due date. If necessary, base implementation grant funds should be used to ensure compliance with the due date. Recipients are to follow the deliverable requirements stated in the General Guidance portion of this document.

POINT SOURCE

Concentration and flow data are required for all parameters listed below for all 12 months of the year.

Data Requirements:

1. At Facility Level: Data must be provided for those municipal, industrial, and federal facilities defined by the jurisdictions as “significant contributors” of total nitrogen and total phosphorus to the Bay watershed. The list of significant contributors should be updated annually with additional facilities that meet the criteria of the significant facility definition. These additions will account for cases where a new facility is built, or the flow of an existing facility has increased when urban development caused service areas to be extended and/or regional facilities were constructed to serve areas with onsite failures or antiquated technology. The location (county, latitude/longitude) of each facility discharge must be reported.
2. At the Monthly Level: 12 months of concentration and flow data must be provided for each outfall that discharges the below identified parameters.
3. At the Parameter Level: There should be at least 7 parameters including nutrient species in each month’s data record for each facility. The following data should be submitted: monthly flows and monthly concentrations of (NH₃), TKN, NO₂ (or NO₂+NO₃), TN, PO₄, and TP for Phase 4.3 of the Watershed Model. To assist in the Phase 5 watershed model implementation, the following data can be submitted: monthly concentrations of BOD, TOC, and TSS. By 2005, monthly concentrations of BOD, TOC, and TSS also will be required.

In the absence of monthly monitored concentration data for one or more of the above listed parameters for a facility, the jurisdiction must submit Point Source Workgroup agreed to default concentration data. (Table 1)

The data should be quality assured for accuracy and outliers prior to submission. General QAQC Requirements are listed in Figure 1.

NONPOINT SOURCE

Each jurisdiction provides progress data in a format unique to that jurisdiction. The Chesapeake Bay Program has worked with each jurisdiction to develop suitable translation mechanisms to convert jurisdiction data into Chesapeake Bay Watershed Model input format. A jurisdiction may not change an existing format, unless approval has been received in advance from the Project Officer. Only changes that move an existing format closer to a Chesapeake Bay Watershed Model standard will be considered and approved.

Nonpoint source BMP information is used to create annual progress scenarios using the CBP Watershed Model (WSM). The information submitted must conform to criteria and agreed-to format established by the Tributary Strategy Workgroup. All BMPs will be submitted on a cumulative basis by county-segment. At a minimum, the following information is required for each BMP: BMP name, county- segment, amount and units of measure. Animal waste systems require additional information: animal type and animal units affected.

Data should be submitted in Microsoft Excel or Access v97 or above. ASCII (tab delimited) is accepted with prior approval from the Project Officer and stated in the Work Plan. Each report must include complete documentation, field names (column headings), and definitions were appropriate. Nutrient reduction activities which are not currently watershed model BMPs will not be credited in the model until the BMPs, their definitions and pollutant removal efficiencies have been reviewed and approved by the Tributary Strategy Workgroup.

POINT SOURCE AND NONPOINT SOURCE REPORTING FREQUENCY

Progress reports are a deliverable of the grant and reported annually. All data is to be quality assured prior to submission to the Chesapeake Bay Program Office. Implementation Grant recipients must provide point and nonpoint source progress data for the previous calendar year on or before July 15th.

Figure 1: Point Source Nutrient Data Processing Flow Diagram

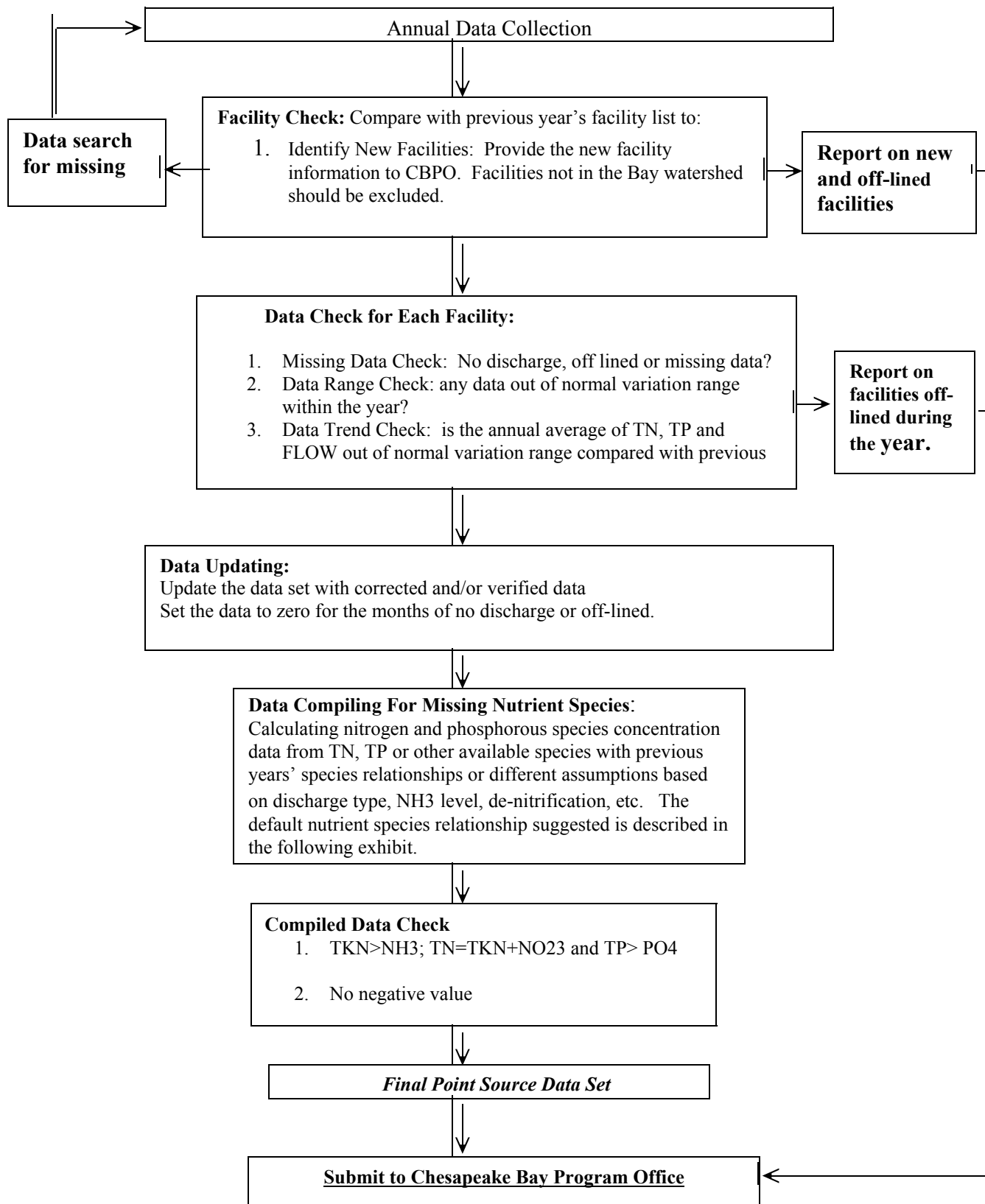


Table 1: Default Nutrient Species Relationship

The following are nutrient species relationships recommended for municipal and industrial facility estimates. These estimates are based on a Stearns and Wheeler Technical Report (*Cost Effective Techniques for Implementing Nutrient Removal in Existing Wastewater Treatment Plants, Stearns & Wheeler LLC, June 1997*) on municipal discharges and follow-up conversations with Stearns and Wheeler regarding this report, in addition to best professional judgment on the part of the Nutrient Subcommittee's Point Source Workgroup.

Type of Point Source		NH3/NO3/OrgN (w/o Nitrification)	NH3/NO3/OrgN (w/ Nitrification)**	NH3/NO3/OrgN (w/Denitrification)
Municipalities		80/5/15*	7/85/8	13/73/15
Industries	Chemical	7/85/8+		
	Non-chemical++	80/5/15	7/85/8	

*Stearns and Wheeler recommends 80/0/20, however, the Point Source Workgroup felt that there would often be minimal (5%) NOx present.

**Apply this relationship wherever NH3 limits apply

+Assumed by performing an analysis of MD chemical industry wastewater effluents that showed it is very close to the relationship for nitrifying sewage. This would apply to all chemical industry discharges and assumes that the wastewaters are treated chemically and thus the effluents would not vary as much as sewage relationships

++Assumes that non-chemical industries are treated biologically and would therefore mirror the sewage relationships.